

## Team Members/Contact Info

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Github Repo

## Data Requirements

- 1,000 rows
- 10 columns

## Team Roles

- **Square:** The team member in the square role will be responsible for the repository.
  - **Triangle:** The member in the triangle role will create a mockup of a machine learning model. This can even be a diagram that explains how it will work concurrently with the rest of the project steps.
  - **Circle:** The member in the circle role will create a mockup of a database with a set of sample data, or even fabricated data. This will ensure that the database works seamlessly with the rest of the project.
  - **X:** The member in the X role will decide which technologies to use for each step of the project. If the team has only three members, then all three members should be contributing to these decisions.
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- **Documentation:** Greg/Molly
  - **Presentation:** Greg/Molly
  - **Data:** Connor
  - **Technologies:** Ashley

- **Code**
  - Machine Learning: Connor/Ashley
- **Testing:** All
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## To Do

- Compile data sources
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- Decide on what question we are trying to answer
  - Is a certain intersection 'deadly'?
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## Project Idea - Dangerous Roadways

- **Article(s)**
  - [Deadliest Road in America](#)
  - [Buttigieg sends \\$5B to cities for safety as road deaths soar](#)
  -
- **Overview**
  -
- **Potential Hypotheses**
  - Increase in pedestrian safety funding will decrease traffic fatalities
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- **Potential Null Hypotheses**
  - Increased funding does not change the rate of traffic fatalities
  -
- **Data**
  - [Pedestrian Traffic Fatalities by State](#)
  - [Fatality Analysis Reporting System \(FARS\)](#)
  - [NHTSA budgeting](#)
  - [PedBike Info](#)
  - <https://www-fars.nhtsa.dot.gov/states/statespedestrians.aspx>
- **Brainstorm, Questions, etc**
  - What makes certain intersections so dangerous?
  - Classify roads and what makes them dangerous?
  - Where are these fatalities happening?
  - Which states have the most fatalities?
  - Which states are seeing increased deaths? Decreased deaths?
  - What contributes to increases or decreases?
    - NTSB funding?

## Presentation Prep

The presentation should tell a cohesive story about the project and include the following:

- Selected topic
  - Reason the topic was selected
  - Description of the source of data
  - Questions the team hopes to answer with the data
  - Description of the data exploration phase of the project
  - Description of the analysis phase of the project
  - Technologies, languages, tools, and algorithms used throughout the project
  - Result of analysis
  - Recommendation for future analysis
  - Anything the team would have done differently
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## Project Idea #2 - Food Deserts

- **Articles**
  - [Food Access Research Atlas](#)
- **Overview**
  -
- **Potential Hypotheses**
  -
- **Potential Null Hypotheses**
  -

- **Data**
  - <https://www.kaggle.com/datasets/tcrammond/food-access-and-food-deserts>
- **Brainstorm, Questions, etc**
  - Rates of diabetes, life expectancy
  - Predicting what locations would be categorized as a food desert?
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## Project Idea #3 - Affordable Housing and Homelessness

- **Articles**
  - [The Importance of Housing Affordability and Stability for Preventing and Ending Homelessness](#)
  - [How Houston Moved 25,000 People From the Streets Into Homes of Their Own](#)
- **Overview**
  -
- **Potential Hypotheses**
  -
- **Potential Null Hypotheses**
  - Availability of affordable housing has no impact on the rate of homelessness
- **Data**
  - [Homelessness Statistics by State](#)
  - [Homelessness in US \(Kaggle\)](#)
  - <https://preservationdatabase.org/>
  -
- **Brainstorm, Questions, etc**
  - Community funding: ratio of community funding to the rate of homelessness
  - What are we trying to predict?
  - How are funds allocated/used to prevent homelessness?
    - Community outreach v. providing houses
  - How effective is affordable housing at mitigating homelessness?
  - How does spend change based on type of area (major metro, small city, town, rural)
  - Homelessness in Oregon
    - How have rates changed based on cost of living (
    - Tax raises
  - Global warming and homelessness
    - How are folks moving around based on climate
  - Crime rates and homelessness
    - Is there a correlation?
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